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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,447	06/29/2001	Michael Benz	112740-138	1290

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EXAMINER
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PEZZLO, JOHN

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/720,447

Applicant(s)

BENZ ET AL.

Examiner

John Pezzlo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>22 December 2000</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). Nine drawings (5 sheets) were found in the PCT information (WO 99/67964) provided and used for the office action. (These drawings should be copied and filed as the drawing submittal.)

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

I. Claims 11-15 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Werth (US 5,920,547).

1. Regarding claim 11 – Werth discloses providing a plurality of frames respectively formed of a plurality of time slots, wherein at least one of the plurality of time slots of each frame is provided for the transmission of organization information items, refer to Figure 1 (slot B) and column 1 lines 1 to 30 and column 3 lines 24 to 50.

Werth discloses transmitting information items from a base station to a plurality of mobile stations within the time slots of the plurality of frames, refer to Figure 1 (slot A) and column 1 lines 30 to 35.

Werth discloses suppressing, via the base station, the transmission of the organization information items in a respective frame depending on a change in a quantity of the information items to be transmitted, refer to the abstract and column 1 lines 59 to 65.

2. Regarding claim 12 – Werth discloses the organization information items are transmitted in a frame only when required, refer to column 1 lines 65 to 67 and column 2 lines 1 to 10 and column 2 lines 24 to 30.

3. Regarding claim 13 – Werth discloses determining the quantity of the information items to be transmitted relative to services and connections supplied by the base station, refer to Figures 2 and 10 and 11 and column 3 lines 55 to 67 and column 6 lines 59 to 65.

4. Regarding claim 14 – Werth discloses determining the quantity of the information items to be transmitted relative to mobile stations supplied by the base station, refer to Figures 2 and 10 and 11 and column 3 lines 55 to 67 and column 6 lines 59 to 65.

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5. Regarding claim 15 – Werth discloses determining a spacing of the frames having the organization information items by a repetition rate having a value greater than one, the abstract and column 1 lines 59 to 65 and column 9 lines 8 to 24.
6. Regarding claim 18 – Werth discloses transmitting useful information items in the frames having suppressed organization information items in the time slot provided for the organization information items, refer to Figures 2 and 10 and 11 and column 3 lines 55 to 67 and column 6 lines 59 to 65.
7. Regarding claim 19 – Werth discloses providing, within a frame, a switching point between transmissions of the base station and from the mobile stations, wherein the information items are transmitted according to a TDD transmission method, refer to Figure 1 and column 1 lines 5 to 23 and column 3 lines 18 to 44.
8. Regarding claim 20 – Werth discloses transmitting useful information items from the base station in the frames having suppressed organization information items in all slots of a frame, refer to Figures 2 and 10 and 11 and column 3 lines 55 to 67 and column 6 lines 59 to 65.
9. Regarding claim 21 – Werth discloses a signal conditioning device for shaping transmission signals for information items to be transmitted, refer to Figures 1 and 12 and column 1 lines 30 to 35 and column 8 lines 37 to 67 and column 9 lines 1 to 24.

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Werth discloses a transmitting device for transmitting the transmission signals within time slots, refer to Figures 1 and 12 and column 8 lines 37 to 67 and column 9 lines 1 to 24.

Werth discloses a frame formed from a plurality of the time slots wherein at least one of the time slots of the frame is provided for the transmission of organization information items in a point-to-multipoint connection to a plurality of mobile stations, Figures 1 (slot B) and 12 and column 1 lines 1 to 30 and column 3 lines 24 to 50 and column 8 lines 37 to 67 and column 9 lines 1 to 24.

Werth discloses a control device, which suppresses the transmission of the organization information items in a frame depending on a change in a quantity of the information items to be transmitted the abstract and column 1 lines 59 to 65 and column 8 lines 37 to 67 and column 9 lines 1 to 24.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Werth (same as above).

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1. Regarding claim 16 – Werth discloses a TDD/TDMA system wherein traffic channels and control channels are transmitted in time slots. Werth discloses that if a traffic channel is required the control channel is suppressed and the traffic channel is transmitted in the suppressed time slot, refer to Figure 1 and column 1 lines 59 to 65.

Werth does not explicitly disclose signaling the repetition rate used to mobile stations by the base station.

At the time of the invention, it would have been obvious to an ordinary person of skill in the art to have Werth signal the repetition rate used to mobile stations by the base station. The suggestion/motivation for doing so is that Werth discloses that the control channel is used for signaling to the mobile stations, refer to column 1 lines 24 to 30. The benefit being that the system would stay in synchronization if all the terminals knew what the frame schedule was going to be in the future which would result in less lost data and higher quality and higher customer satisfaction.

III. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Werth (same as above) in view of Kay et al. (US 5,513,183) hereinafter Kay.

1. Regarding claim 17 – Werth discloses a TDD/TDMA system wherein traffic channels and control channels are transmitted in time slots. Werth discloses that if a traffic channel is required the control channel is suppressed and the traffic channel is transmitted in the suppressed time slot, refer to Figure 1 and column 1 lines 59 to 65.

Werth does not explicitly disclose the organization information items are transmitted only upon request by a mobile station with regard to the information items to be transmitted.

Kay discloses that the remote requests control information from the base station, refer to column 3 lines 54 to 63.

At the time of the invention, it would have been obvious for an ordinary person of skill in the art to combine Kay with Werth in order that the organization information items are transmitted only upon request by a mobile station with regard to the information items to be transmitted. The suggestion/motivation being that Werth discloses waiting for the mobile to request a traffic channel, refer to column 1 lines 59 to 65. The benefit being that a scarce resource is utilized and if no control information is required by the mobile stations than the control channel can be used for a traffic channel and provide more data bandwidth to the customers.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Kay et al. (US 5,299,198) discloses a method and apparatus for exploitation of voice inactivity to increase the capacity of a TDMA radio communications system.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

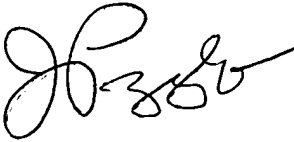
Jefferson Building

500 Dulany Street

Alexandria, VA.

John Pezzlo

9 March 2005



**JOHN PEZZLO**  
**PRIMARY EXAMINER**